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## ABSTRACT

This report reviews the literature relating to computer uses for elders. Topics include: (1) variables affecting computer use by elders; (2) organizations and programs serving elders in Champaign County, Illinois; (3) University of Illinois workshops on problems of older people; (4) The Senior Citizens Project of Volunteer Illini Projects; (5) Senior Citizens programs in the summer session of the University of British Columbia. (DAG)

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The Illinois Series on Educational Applications of Computers

ELDERS, STUDENTS AND COMPUTERS -

Background Information

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### Preface

Many subjects treated at the college level, and the corresponding study materials, are also appropriate for work in secondary schools. The purposes may be very much the same at the two levels. These similarities characterize participation in the new area of activity, computer uses for elders; and here the purposes for the high school and college student are the same: to broaden the social and technical skills and the perspectives of students through their participation with elders in the development of computer uses for elders (CUE).

Computer uses for elders in Illinois has thus far been developed primarily through the efforts of students at the University of Illinois and their colleagues among the elders (senior citizens). A few high school students have, however, already made valuable contributions to this new team of "elders, students and computers."

Elders participate in CUE development because a) "they are part of the problem"; b) CUE can serve many and serve them well only if elders help "spread the word"; c) some elders will find CUE to be exactly what they are very interested in doing (and there are many types of CUE activity, just as there are many types of educational applications of computers).

High school students have at least two roles that are essential in the successful development of computer uses for elders. The first of these is a general "humanistic" role: the students discover a relationship with elders (who - like them - often are isolated, as individuals or as a group); and in addition, it is hoped, they carry the effect of that relationship back to their own families, where they can serve as a bridge between generations. The second role is more specialized, involving the students' capabilities in developing and using humanized computer programs. (See Reference 2.)

Our discussion of computer uses for elders appears in two ISEAC papers under the generic title, "Elders, Students and Computers:" ISEAC Number 7 ("A New Team") and ISEAC Number 8 ("Background Information").

We hope that these two papers, though based on university-community experience, will suggest to teachers and students in the schools many of the opportunities for programs of study and participation in this new field, computer uses for elders.

Bruce Hicks  
ISEAC EDITOR

Elders, Students and Computers - Background Information

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## 1. Introduction

In ISEAC No. 7, "Elders, Students, and Computers--A New Team," we discussed our work on computer uses for elders (CUE) and suggested guidelines for future work. Because CUE is a new activity and a new subject of study, it is not surprising that we did not find papers specifically about CUE in the literature. We have, however, collected here, in Sections 2 to 3, background information of several types that we have found useful in our CUE studies.

Sections 2 and 7 refer directly to computer uses for elders. Section 2 deals with some of the variables affecting the success of computers uses for elders, and points to some of the sociological and psychological issues involved. The intent of this section is to generate ideas around which social studies classes and computer science classes, working with elders, could develop their future CUE projects. Section 7 reports the encouraging results of a survey of computer interests conducted among Senior Citizens in British Columbia. Sections 3 through 6 briefly describe general programs and services available to elders with examples drawn from Illinois and British Columbia. We include them because they suggest services into which CUE may be advantageously fitted in the future and which are typical of similar services throughout North America. In Section 8, we refer to some of the available literature that has proven helpful to us.

Acknowledgement for the contributions of many individuals to our work on CUE was given in ISEAC Number 7.

## 2. Variables Affecting Computer Use by Elders

The social, educational, recreational, and health needs of elders are affected by many variables. Seeking understanding of these effects and a global appreciation of the lives and needs of individual elders seem to us to be excellent sources of study projects in social studies classes in secondary schools. In particular, the potential impact of computer uses for elders can be both studied and developed at the same time, in cooperation with elders, by students (college or high school) in social studies classes. In this section of the paper we examine some of the variables in order to suggest the range of topics that are open for study.

The implication of the concept "computer uses for elders" is that "elders" can be considered as a unit--a group for whom certain unique computer uses exist. While this is true in part, as was shown in Reference 1, the implication also gives rise to the possibility of a serious misconception--that "elders are elders," and that a program suitable for one elder will be equally suitable for every other elder. This is not true.

Differences exist among people over age 65 just as much as they do among younger people: differences based on physical ability, educational levels, work experiences, socioeconomic status, hobbies, interests, involvement or lack of it, etc. Consequently, this project--like any effort to serve senior citizens--must take these differences into account. This means that a variety of programs should be available, and that they should be offered--if possible--in a variety of circumstances (in neighborhood community centers, and retirement homes, as well as in downtown centers or "retirement villages").

Consideration of these differences opens a myriad of possible investigations. For example, what special adaptations should be made in providing computer access to the physically handicapped? Or what contrasts would exist between programs presented to elders who have had clerical experience and programs presented to those who have not? Might ethnicity be a factor in elders' attitudes toward such an education project? (See Reference 2.) Or, how might socioeconomic status affect both the interests and the abilities of senior citizens? Each of these questions, and many others like them, could provide material for a full-scale study of the variety of elders and of their use of computers.

As one example of many questions that could be examined, we will consider that last question: how might socioeconomic status affect both the interests and abilities of senior citizens? In particular, let us examine the "blue-collar" senior citizen, who might be expected to be less likely than his "white-collar" counterpart to seek any educational activity for its own sake.

Traditionally, formal education is not as highly valued as informal education in the blue-collar lifestyle. Though this may be a reflection of the "chicken or egg" type of vicious circle (i.e., limited access to education resulted in a decreased emphasis on its value; the lack of value associated with education resulted in less desire to have access to education) it is a factor which must be taken into account in any adult education project. (A study completed by the University of California Research Center, for example, found that while a "white collar" adult will seek information from media, experts, and associates, his "blue collar" counterpart tends to depend only on associates for information. See Reference 3.) Because this is so, we would be foolish to expect that suddenly--at age 65--a retired factory worker or bus driver or seamstress is going to be eager to spend his or her free time at the downtown "senior citizen center" where retired school teachers and business executives are trying to organize some continuing education classes. Nothing "miraculous" happens at age 65--or 60, 75, or 80--to magically eliminate the habits, attitudes, and values which have been accruing throughout a person's life.

This presents a problem for teachers and students who would seek to promote computer uses for elders. On the one hand, CUE offers potential benefits for all elders, regardless of race, ethnicity, or socioeconomic status. These benefits are collectively referred to as "computer literacy," a means through which elders can gain at least a minimal understanding of a computer's role in their lives--from its control of social security and medicare payments to its function in the education of their grandchildren. On the other hand, though, those elders who might have the most to gain and/or to contribute (i.e., the elders who have traditionally stayed away from "authority" and "media" as information sources, and who have felt most victimized by "the system") are not likely to avail themselves of such a service if it is only offered through an educational (or other seemingly authoritarian) institution.

Thus, access becomes the first consideration in developing a computer uses for elders project. Fortunately, the desires to remain active and to share the wisdom of age with others are not limited to any particular racial, ethnic, or socioeconomic group of elders; so a CUE project can succeed if the elders and the

computers are brought together. But the provision of terminals in a downtown location will not accomplish this if that center is "middle-class oriented," discouraging blue-collar persons from attending. (See Reference 4.) Terminals must be located in a setting where blue-collar elders are likely to be--whether that is a community center, a health-care center, or even the residence of a "significant other" in the lives of this target population. (Even the neighborhood tavern is a possibility. Though that site eliminates the direct interaction of the high school students with the elders, the students might still be responsible for programming. And word-of-mouth publicity is likely to be particularly widespread.)

But access alone will not guarantee that the blue-collar elder will USE the computer. He or she must feel sufficiently comfortable and sufficiently motivated to "experiment" with this phenomenon. Comfort, again, is dependent upon the setting. Someone with whom the elder feels at ease-- whether paid staff or volunteers of the community center or younger persons from the same neighborhood-- must have had instruction about the capabilities and limitations of the available computer facility. In that way, casual question-and-answer sessions, or brief displays, may increase the likelihood of the senior citizens' using the computer.

Attention to setting, therefore, can increase both the accessibility and the attractiveness of computer uses for elders. It can expand the range of potential users by "taking the computer to the people" rather than waiting for people to discover the computer. The ultimate success or failure of computer uses for elders, though, will depend upon the uses themselves. Can the computer provide services for people which cannot be provided in other ways? Or can it, at least, provide certain services more efficiently? The answer, at this point, is unknown; only further development of the concept will provide enough evidence for making a judgment.

The one service unique to a project on computer uses for elders, of course, is the previously defined "computer literacy." Elders, like people of all ages, can better accept the ever-increasing presence of the computer in their lives if they understand the basic functioning of it. Particularly beneficial is their gaining and understanding of the importance of the human element in computer operations, of knowing that people--not machines--do the programming and the key-punching. "Hands-on" experience with a terminal--if only to have the opportunity to type in a few words or to see what happens when the plug is pulled--teaches better than any book or lecture ever could about the many things that can go wrong (as well as right) with a computer.

Other advantages of CUE are not necessarily unique, but do offer another and often new way in which elders can interact with one another and with younger people. (Sometimes the very novelty can be an attraction.) Among these activities are game-playing (one elder remarked, about computerized checkers, that he did not have to worry about spilling the checkers on the floor); accumulating a body of easily updated and cross-referenced information (whether it be a community calendar or a compilation of local folklore); and displaying knowledge gained from experience (for example, through simulations). Such experience may have value for the elders

not only because of the knowledge they gain, but also because it equips them as models or even tutors for their children and grandchildren. In addition, our experience has shown that the computer becomes an incentive to socialization as elders often congregate in small groups around a terminal both to comment and to assist one another with typing skills.

In addition to these informal learning benefits and the enhancement of attitudes about ability and self-worth, another value of the computer may lie in providing that formal learning earlier identified by the blue-collar citizen as unimportant. That is, for many of these senior citizens, formal learning in their youth was rejected less from a lack of desire than from more pressing responsibilities. The family needed income, for example; and a thirteen-year-old could contribute more by getting a factory job than by going to high school. For many of these people a high school diploma may long have been secretly coveted, but dedication to family and to the work ethic made schooling an unachievable (and therefore, undesirable) goal. Now, accessibility of a computer terminal and numerous programmed GED lessons may make that long-forgotten dream become reality. (This is NOT to say that computerized GED lessons are more likely than regular GED lessons to attract elders. It does say, though, that the combination of group lessons with peers and private tutoring via computer--where one need have no fear of embarrassment--is more likely to succeed than either method alone.) Similarly, basic nutritional or medical information, about which an elder might be hesitant to ask a doctor, nurse, or social worker, could be provided on the computer--so that questions could be asked anonymously and answered in privacy.

Concerning these "formal" uses, critics might suggest that books or pamphlets--or even kaffee klatsches--accomplish the same thing. That is largely true. Once again, though, the advantage lies in simply increasing the number of options open to elders. If there is even a possibility that computers could "open new doors" for some elders, that possibility deserves to be presented to them.

As may have become evident, many of the problems and possibilities suggested here are not unique to blue-collar elders. "Clannishness," for example, may often develop from ethnic bases, irrespective of economic status (Levine, Reference 2, offers a good presentation of this issue); and physical problems, such as failing eyesight or limited mobility, know no economic or social-group barriers. What should have become clear, though, is the need to recognize differences among elders. Only if these differences are recognized and dealt with is there any hope of eventually discovering how useful CUE can be.

### 3. List of Selected Organizations and Programs Serving Elders in Champaign County

This list suggests the range of services and the varied types of organizations and programs serving elders in Champaign County, where the University of Illinois is located. The organizations and programs listed do not include public and private facilities for care of elders, nor (with the exception of the educational institutions) organizations NOT primarily concerned with services to elders. In



addition, there are many organizations centered in churches or small communities in the county which we have not listed. Though services for elders are neither ideal nor complete, Champaign County does offer more than many counties in Illinois. Similar organizations and programs already exist or could be started in other counties.

Additional information concerning the functions of any of these agencies is available from the Voluntary Action Center of Champaign County.

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Information, Referral and Liaison

- \* Champaign County Office on Aging
- \* Committee on Aging (Council of Congregations)

East Central Illinois Area Agency on Aging

Rantoul Referral Center

Telecare

- \* Financial Aids (Medicare, Medicaid, Supplemental Security Income)

Aids to Independent Living

- \* East Central Nutrition Project

Homemakers

Meals on Wheels

Older Workers Program

Senior Talent Employment Pool

Senior Transportation Service

- 
- \* This is (or could become) an appropriate site for computer use for elders.

Recreation/Education/Volunteer Activities

The Anna Tutt Homes

Retired Senior Volunteer Program (RSVP)

\* Senior Citizen Drop-in Centers

Champaign Park District

Urbana Park District

Rantoul Recreation Department

\* Volunteer Illini Projects (VIP - University student volunteers)

\* Universities and Colleges

\* Parkland College

\* University of Illinois (School of Social Work, Department of Secondary Education, Office of Continuing Education, Ag Extension and other departments)

4. University of Illinois Workshops on Problems of Older People

Much of the incentive for our work with computer uses for elders resulted from day-long action workshops on the problems and rights of the aged. Though computer use was not itself a topic at the sessions, several of the sessions dealt with situations in which CUE could eventually prove valuable. These workshops held at the University of Illinois on October 29, 1974, were led by Maggie Kuhn, National Convenor of the Gray Panthers.\*\* Besides coordinating the workshop sessions, Ms. Kuhn presented an invited lecture. The workshops and lecture were sponsored by the Volunteer Illini Projects, the School of Social Work, and the Miller Committee Lecture Series.

Each of the workshop sessions was limited to 20 people and included elders, students, student volunteers, faculty and community service agents. Facilitators were selected from a number of communities in Central Illinois where they were active in work with elders.

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\* This is (or could become) an appropriate site for computer use for elders.

\*\* The Gray Panthers organization works for "the elimination of agism, the barrier that isolates the old from the young."

The topics of the workshop sessions were:

1. Who Hears the Beat?
2. Retirement: Rest or Restlessness?
3. Nursing Homes
4. Overcoming the Fear of Death
5. Accessibility
6. Housing Alternatives
7. Never Too Old to "Live and Learn"
8. Health Care for the Aged
9. Institutional Watchdogging

The list is reprinted here to provide suggested approaches to CUE program development in the future and to recall many of the principal concerns of elders.

#### 5. The Senior Citizens Project of Volunteer Illini Projects

This student-staffed and -sponsored project started in 1965 in nursing homes. About 50 student volunteers, on the average, now work both in nursing homes and in community centers.

The following description is part of the material used by Volunteer Illini Projects in training their volunteers. It is reprinted here as a potential model for materials to be distributed to students who staff projects on computer uses for elders. The knowledge and attitudes needed would be much the same in the VIP and CUE activities.

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Old age used to be considered a blessing and an accomplishment. In a rapidly moving world, that status has changed. Retirement puts many healthy minds out to pasture, and death leaves many without their lifelong companions. Consequently, our elderly neighbors suffer not only from decreased involvement from the mainstream of life, but also from loneliness and withdrawal. This problem is one which in many cases can be tackled by companionship and friendship. That is where you, the volunteer, can be involved.

Presently, VIP volunteers have a wide spectrum of settings in the Senior Citizens project. You have the opportunity to interact with a senior friend on a one-to-one level, or to work with a large group in a planned activity setting. You also have a choice of working with seniors in the nursing home environment, or a local walk-in community center, or in some of the seniors' own homes.

Volunteers are always invited to initiate new programs, ideas and settings which will better accomodate the senior citizens problems in our community. Hopefully, we can keep this program as flexible as possible and provide the volunteers with an opportunity to creatively experiment for educational purposes and personal development.

General Skills Needed (all areas)

Ability to initiate conversation with strangers is needed. It is important to come prepared with several different topics of conversation. You must be able to cope with discouragement. You may not be able to crack the psychological shell of some of our senior friends. It is very helpful if you are able to lead group activities such as singing, games and discussions. Don't be discouraged if your group is not as receptive as you had hoped. One final note: Seniors always deserve your respect as well as your compassion. They are adults, not children...treat them accordingly.

Nursing Homes (Champaign County; Americana (Champaign and Urbana); Heritage House)

- I. TYPE OF POPULATION: The residents of these nursing homes will have a varied range of physical abilities and emotional potentials which demand flexible volunteers. Large group activities are possible as well as personal interactions.
- II. TRAINING OF VOLUNTEERS: Training meetings will be arranged throughout the year as the need arises in addition to 'in-service' films, discussions etc.
- III. TIME REQUIREMENT: We hope to remain as flexible as possible and hope that the volunteers see the benefits of making and keeping a time commitment.
- IV. TRANSPORTATION: The Americana homes are in walking distance. Champaign County provides a van to transport volunteers.
- V. DIRECTOR: Marty Gorbien, 608 E. White #12 Champaign.

Community Centers (Anna Tott Honeys; Champaign Downtown Center)

- I. TYPE OF POPULATION: The elderly here are very mobile, alert, and involved in community affairs.
- II. TRAINING: Training is provided by the Center Director, and 'in-service' movies and discussions will be held throughout the year.

III. TIME REQUIREMENT: Same as nursing homes.

IV. TRANSPORTATION: Bus cards are available at the VIP office.

V. DIRECTOR: Same as nursing homes.

6. Senior Citizens Programs in the Summer Session of The University of British Columbia\*

As an example of the fact that many elders are interested in participating in educational programs, we offer in Part 6 a description of the summertime Senior Citizens Program started in British Columbia. In Part 7, we present the results of a survey about computer use by participants in one of the UBC summer sessions.

"Senior Citizens Program - The Summer Session of 1974 saw the inauguration of the first university-based program in Canada designed for Senior Citizens. This program was made possible by a special provincial grant of \$15,000 for creative and innovative programs. There were 500 Senior Citizens enrolled in the special interest courses. Of this number, there were 40 registered for the regular credit courses on an audit basis and 24 registered for credit.

The 1975 Summer Session Program for Senior Citizens enrolled 600 students; 23 of these students were registered in the regular undergraduate credit courses. The significant changes and innovations in the 1975 Senior Citizens Program were as follows:

- a) The University now funds this program as a regular part of the Summer Session budget. This is a significant step for the University to take for it shows a serious commitment to new forms of community involvement and service and to the general principle of providing life long learning opportunities.
- b) Last September, a Senior Citizens Planning Committee was formed, made up of 12 Senior Citizens from the 1974 summer program, 1 graduate student in Adult Education, and the Director and Associate Director of Summer Session...
- c) - - - - -
- d) A 6-page survey was mailed to each participant to obtain his reaction to the program and suggestions for future programs. To date, over 200 surveys\*\* have been returned and compiled. Like last year, the general reaction to the program was overwhelmingly positive.

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\* Relevant sections are quoted from Reference 5. The Director of the Summer Session is Dr. Norman S. Watt.

\*\* See Section 7 for a summary of the surveys.

New Horizons Summer Festival and Leadership Training Program -

New Horizons is a federally funded agency with offices in each province. Its purpose is to provide grants for Senior Citizens projects. In other words, they provide money so that Senior Citizens can help themselves develop new interests or maintain and perfect skills and talents already present. To date, there have been over 650 New Horizons projects funded in B.C.

A sub-committee of the Senior Citizens Program Planning Committee was formed to apply for a New Horizons Grant for the purpose of sponsoring a 2-day summer festival and a 9-day leadership training program. This committee received a grant of \$27,000 for this purpose.

- a) New Horizons Summer Festival - The purpose of the Festival was to bring together the recipients of New Horizons Grants in order to publicize the activities of seniors, facilitate the exchange of ideas and foster the preservation of pioneer and cultural skills. It must be noted that the Festival was not limited to New Horizons people but to all seniors of the Province. Over 200 people from all over the Province were involved in the displays and entertainment provided to the general public at no cost. Approximately 4,000 people were in attendance at this 2-day festival of senior achievement. This program was coordinated by Mr. Laird McCallum.
- b) Leadership Training Program - This 9-day live-in workshop enrolled 60 seniors. Only seniors from outside of Vancouver District were selected, due to the fact that there were four times as many applications as there were spaces. It was also felt that this kind of training was more available to seniors in the larger urban areas.

The purpose of the workshop was to encourage group involvement by seniors and to provide direction and guidance in such matters as planning, organization, administration, and management of Senior Citizens organizations and group activities. The workshop was directed by Dr. Jim Thornton of the Adult Education Department."

7. Survey of Senior Citizens in the 1975 UBC Summer Session

a) Questions About Computer Use

If computer education or services interest you, please answer the following questions. Your name and address would be appreciated so that we can get in touch with you if and when a course on computers is offered to Seniors.

- (a) Have you used computer services in your work before retiring (whether in business, accounting, education, engineering or other work)?

Yes \_\_\_\_\_ No \_\_\_\_\_

- (b) Do you have any experience in data processing, computer programming or other computer-related activities? If the answer is "yes," please briefly describe your experience.

Yes \_\_\_\_\_ No \_\_\_\_\_

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- (c) Would you like to use computers yourself, in any easy way, for recreation, or education, or consumer services?

Yes \_\_\_\_\_ No \_\_\_\_\_

If "yes," which of the following activities would you be most interested in?

Recreation \_\_\_\_\_ Education \_\_\_\_\_ Consumer services \_\_\_\_\_

- (d) Would you be interested in learning about the potential advantages and disadvantages of computer services for senior citizens?

Yes \_\_\_\_\_ No \_\_\_\_\_

- (e) Would you like to learn a simple computer "language" so that you can write your own computer programs for recreation, education, or consumer services?

Yes \_\_\_\_\_ No \_\_\_\_\_

- (f) Would you like to meet for small group discussions of these and similar questions?

Yes \_\_\_\_\_ No \_\_\_\_\_

Name: \_\_\_\_\_ Address: \_\_\_\_\_

b) Results of the Survey

The 600 senior citizens who were enrolled in the 1975 Summer Session probably had better academic background than the average senior citizen. Of these 600, 250 returned a 6-page survey about their experience in the summer session. Of these 250, 85 senior citizens (or 34%) answered the questions about computer use\* listed above.

\* The questions had been prepared by Bruce Hicks.

More than 20 of the 85 elderly citizens had worked with computers or data processing in some way before retiring. At the time of the survey:

- 64 wanted to use computers (20 for recreation, 33 for education, 36 for consumer services)
- 77 wanted to learn the advantages of computers
- 70 wanted to learn the language of computers
- 66 wanted to meet in discussion groups treating computer-related topics

For this group of 85 elders there was indeed high interest in further work with computers.



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